BY THE U.S. GENERAL ACCOUNTING OFFICE

Report To The Secretary Of Labor

A Comprehensive Approach Needed For Further Productivity Improvements In The Unemployment Insurance Program

The Department of Labor and the states have achieved productivity increases in administering the Unemployment Insurance program over the past 20 years. However, GAO-developed productivity measures show wide variances in productivity rates among the states and offices within states, indicating the potential for further increases and financial benefits.

Use of productivity management--an approach that involves developing a productivity plan with goals and accountability mechanisms--can help to achieve these benefits. While the department has sponsored periodic projects to improve productivity in the past, these efforts have been limited. Also, productivity is not now a specific management objective nor does Labor have a systematic approach for achieving productivity improvements.

This report discusses the productivity rate variances among all states and some of the conditions contributing to variances in the six states GAO visited. GAO is recommending that the Secretary of Labor (1) develop, in cooperation with the states, a comprehensive plan for promoting productivity improvements within the Unemployment Insurance system and (2) determine the need for and type of incentives for encouraging states to adopt practices which would improve productivity.

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UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

HUMAN RESOURCES
DIVISION

B-216656

The Honorable Ford B. Ford
The Under Secretary of Labor

Dear Mr. Ford:

We have completed our review of productivity in the Federal-State Unemployment Insurance (UI) program. By productivity, we mean the use of minimal resources to perform, in a timely and accurate manner, the tasks required to administer the UI program. Our review was limited to determining (1) how productively states administer the UI claims examining and benefits paying operations and (2) what the Department of Labor's efforts were in managing the promotion of productivity improvements. Accordingly, we were concerned with the amount of resources used and the process followed in performing the required administrative tasks, which include establishing the claimant's eligibility and benefit amount, making payments, hearing appeals, and collecting taxes.

States have achieved productivity increases in administering the UI program over the past 20 years. Nonetheless the potential exists for further improvement. There are significant differences in productivity rates among states and offices within states, and we believe much of the difference is attributable to variations in operating practices. Our findings are summarized below and detailed in appendix I. Nine additional appendixes provide further information and discussion on several technical aspects of our study, including our methodology for measuring productivity, past productivity trends for the UI program, and productivity measurements and levels for the various states.

We examined a 20-year productivity trend, but focused on the last 5 years (1978-82), and we did not examine employment services (i.e., job placement) authorized under the Wagner-Peyser Act of 1933, as amended. Our review approach was to measure and compare productivity among all states and among

offices in selected states and to identify key conditions contributing to either high or low productivity. We prepared productivity and unit cost measures for 5 years (fiscal years 1978-82) for all the states. We also prepared productivity measures for fiscal year 1982 for each office in six states (Florida, Massachusetts, North Carolina, Tennessee, Texas, and Virginia). We examined operating practices at 20 offices within these six states to determine if opportunities existed for productivity improvement. Also, we discussed the results of our measures and observations with state officials in the six states reviewed and with officials in your Employment and Training Administration (ETA). (See app. II for details on our study methodology.)

PRODUCTIVITY HAS INCREASED BUT FURTHER GROWTH IS POSSIBLE BY ADOPTING BEST OPERATING PRACTICES

Administrative efficiency for the overall program has increased by about 40 percent over the past 20 years (1963-82), based on Bureau of Labor Statistics measures. However, the rate has varied markedly from year to year, tending to reflect changes in claims volume. For example, productivity rose to its highest in 1975 (higher than in 1982) following an increase in claims, and it dropped to an 8-year low in 1978 following a decrease in claims. Substantial financial benefits have accrued from the productivity increase. As one measure, administrative costs in 1982 would have required about an additional $300 million had productivity remained at the 1978 level.

The potential for further productivity improvement is indicated by the wide variances in productivity among states and offices within states, as shown by measures we compiled. (See app. I, pp. 5 and 6.) In 1982, productivity among all states ranged from a weighted average of 19 to 40 hours per case; this wide separation has persisted for at least the past 5 years. This means that some states are using up to twice as many staff hours on average as other states to do essentially the same thing. The variance in productivity among offices within the states we reviewed was even greater; for example, in one moderately efficient state, productivity between the most and least efficient offices in 1982 ranged from 7 to 29 hours per case. In another state, the range was from 6 to 59 hours per case, a 939-percent variance.

Numerous factors contribute to the variation in efficiency within and among states. ETA and state UI managers attribute the differences to operating practices, program structure, and

demographics. We observed evidence of all three, but from our review of 20 offices in six states, much of the variation appears attributable to differences in operating practices which states can change to increase productivity. The following are two primary examples of operating practices affecting processing efficiency.

--Use of computers. All six states we reviewed had computers, but the most efficient state had designed its system to make more effective use of the computer's capability.

--Matching staff to workload. Adjusting staff levels to match changes in work volume is key in sustaining productivity. In the UI program, the workload fluctuates by both day and season, and may vary by 200 percent or more within a year, the adjustment is often made by using part-time help. We observed that the highly productive offices made extensive use of part-time help, and the most productive states had laws providing flexibility in hiring and retaining part-time employees.

Modest productivity gains could result in sizable financial benefits. For example, if the lower performing states could become 85 percent as productive as the most efficient states, and not decrease their payment accuracy, about $140 million annually in salary costs could be made available for other use in the system.

ACTIONS NEEDED BY LABOR TO FACILITATE AND ENCOURAGE IMPROVEMENT

Productivity improvement receives some Department of Labor management attention, but is not now a specific management objective nor does Labor have a comprehensive approach for achieving productivity improvements. While ETA periodically sponsors various initiatives to improve productivity, and has been reducing administrative funds to force improvement, these efforts have been limited. GAO recognizes that the UI system is a federal/state partnership program and that the states have considerable authority to determine how their programs are designed and operated. We believe, however, that Labor should develop, in cooperation with the states, a comprehensive management approach that other organizations striving to improve productivity have found useful.

This approach involves developing a plan that includes, among important elements, measures of productivity and unit

costs, improvement goals, and a way to identify and share among the states best operating practices for increasing productivity. ETA already receives from states the data needed to develop productivity and unit cost measures. However, it does not compile such measures and has not established improvement goals with states. Also, it does not have a group actively working with states to identify and disseminate information on efficient operating practices.

ETA officials stated that they had attempted to deal with productivity in a number of different ways and each attempt met with limited success. They stated that while productivity improvement is important, a multitude of such recent events as the cyclical unemployment swings, legislative changes, and staffing limitations have inhibited a more forceful move in this area.

In addition, while Labor's method for funding UI program administration includes some provisions for states to sustain their productivity levels, it does not provide states with incentives to improve their performance and reduce costs below the federally established funding levels. States are paid a set amount for each workload unit they complete, such as processing an initial claim. If states spend more, the excess is not reimbursed, but if they spend less, they are reimbursed the actual amount spent. Thus, states have little incentive to adopt the productivity improvement measures suggested in this report.

Labor officials recognize the merits of providing incentives for improving productivity, but are not sure what would be effective, equitable, and politically acceptable. Therefore, Labor may wish to develop several projects to assess the potential benefits and determine which types of incentives would be most suitable for promoting state adoption of operating practices for increasing productivity.

RECOMMENDATIONS

We recommend that you direct ETA to develop a plan for improving productivity in administering the UI program to include: (1) measures of productivity and unit costs, (2) improvement goals, and (3) a joint approach with states to identify and disseminate information on best management practices. We also recommend that you direct ETA to assess the potential benefits and determine which type of incentives would be most suitable for encouraging states to adopt best management practices.

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As you know, 31 U.S.C. section 720 requires the head of a federal agency to submit a written statement on actions taken on our recommendations to the Senate Committee on Governmental Affairs and the House Committee on Government Operations not later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

We are sending copies of this report to the Director, Office of Management and Budget, and your Inspector General. Copies will also be sent to the Senate Committee on Finance and the House Committee on Ways and Means.

Sincerely yours,

Richard L. Fogel
Director

Contents

ABBREVIATIONS

ETA	Employment and Training Administration
GAO	General Accounting Office
MPU	minutes per unit
UI	unemployment insurance

A COMPREHENSIVE APPROACH NEEDED FOR FURTHER PRODUCTIVITY IMPROVEMENTS IN THE UNEMPLOYMENT INSURANCE PROGRAM

INTRODUCTION

The Unemployment Insurance (UI) program, established by the Social Security Act (42 U.S.C. 501), is a federal/state partnership that provides income insurance to unemployed workers. Although grounded in federal law, the program is executed at the local level by 53 UI jurisdictions--the 50 states, the District of Columbia, Puerto Rico, and the Virgin Islands--in accordance with their own laws and policies and with their own employees. At the federal level, the Department of Labor's Employment and Training Administration (ETA) administers the program and is essentially responsible for assuring that the states operate effective and efficient programs.

The law directs the Secretary of Labor to grant states the amount of money necessary for the proper and efficient administration of their programs. Funds for administration are collected by the Internal Revenue Service from a tax on employers. Each state sets and collects taxes for benefit payments, and it determines benefit payment levels. In fiscal years 1982 and 1983, administrative costs were about $1.4 billion and $1.7 billion, and benefit payments were about $19.3 billion and $20.9 billion, respectively.

State administrative fund allocations are determined through a work measurement based "cost model" system that ties funding to workload. In the cost model, work is divided into quantifiable units, such as initial applications completed, weeks claimed, etc. (see app. II), and states measure the number of minutes they use to perform each work unit. ETA monitors the measurement and approves the number of minutes per unit (MPU) each state is allowed and the cost it will be allowed for each unit. States earn reimbursement based on the volume of work produced. States are funded at a base level, but earn more funds as their workload increases, and they earn less when the workload decreases. However, states are paid for the lesser of what they earn or what they actually use above the base level. (See app. X for further details.)

APPENDIX I

IMPROVING PRODUCTIVITY IS ONE OF MANAGEMENT'S IMPORTANT JOBS

Improving productivity has long been recognized as vital to both the private and public sectors of the economy. In the private sector, productivity improvements can lessen the impacts of inflation and keep a company competitive. In the case of government, it can help to hold the line on government resource needs. Productivity improvement is one of the few methods by which the government can reduce costs while at the same time maintain or improve the level and quality of services.

Peter Drucker, a noted management specialist, has said that the continuous improvement of productivity is one of management's most important jobs. He also has said that productivity measurement is the best yardstick for comparing managements of different units within an enterprise and for comparing managements of different enterprises. Management performance can also be judged by comparing an organization's productivity growth over time.

While there are some structural differences in state UI programs, we believe that the programs are sufficiently similar to permit meaningful comparison of their productivity and to identify best practices that increase productivity.

REVIEW OBJECTIVE, SCOPE, AND METHODOLOGY

Our review objective was to determine if opportunities exist for productivity improvement in administering the UI program and what Labor was doing to promote improvement. Accordingly, we were concerned with the amount of resources used and the process followed in performing the required administrative tasks. These tasks include establishing claimants' eligibility and benefit amounts, making payments, hearing appeals, and collecting taxes.

Our review approach was to measure and compare productivity among the states and among offices in selected states and to identify key conditions contributing to high or low productivity.[1]

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[1]Calculation of productivity requires three pieces of information: workload (work units completed), resources expended, and workload weights (applied to account for the relative difficulty in processing each work unit). As resources we used staff hours in our productivity measures and dollars in our unit cost measures. Labor has established 17 common work units-outputs as part of a uniform work measurement system that all states use. Weighting enables us to compare productivity among states and offices even though the mix in work units they process may be different.

In our analyses, we used productivity measures that the Bureau of Labor Statistics computed for the UI program from 1963 to 1979 and updated them through 1982. We computed productivity trends and unit costs for 5 years (fiscal years 1978-82) for all 50 states, Puerto Rico, and the District of Columbia with "cost model" data reported by the states to the Department of Labor, or directly from the states when not available at Labor. We also computed productivity levels for fiscal year 1982 for each office in six states (listed below) with data provided by these states. A thorough analysis of the accuracy of the data was not practical, but we made various cross correlations to assess its reasonableness and made some tests at the local offices reviewed. Through this process we found that workload counts for nonmonetary determinations (such as decisions to deny benefits for a specific period, e.g., 2 weeks) were not reliable. Accordingly, we included the time expended but did not use the workload counts in computing our measures. (See app. II.)

To identify opportunities for productivity improvement, we examined operating practices at 20 offices within the six states reviewed. These offices and our reason for selecting the six states are listed below.

	Reason for selection
Tennessee:	
Nashville Chattanooga Murfreesboro Gallatin	Preliminary data indicated that it was one of the most efficient states.
Florida:	
Miami Jacksonville Naples Leesburg Tallahassee	Preliminary data indicated that it was one of the highest volume states in the eastern region.
Texas:	
Victoria Waco	Large geographic area.
North Carolina:	
Burlington Henderson	Preliminary data indicated it had high productivity.
Virginia:	
Covington Rocky Mount	Preliminary work was started in Virginia.

	Reason for selection
Massachusetts:	
Boston	In Massachusetts, unlike most states, employers report wages to the state only when requested.
Worcester	
Gloucester	
Chicope	
Webster	

The 20 offices were judgmentally selected from among the 306 in the six states. Our basic criterion was to select high and low productivity offices with varying demographic characteristics.

We conducted this review in accordance with generally accepted government auditing standards, and our productivity measures were developed using the Department of Labor measurement techniques for activities with multiple outputs. Details on our measurement methodology are in appendix II. Our fieldwork was performed between October 1982 and September 1983.

PRODUCTIVITY HAS INCREASED BUT WITH MARKED FLUCTUATIONS

Productivity for the overall UI program increased by about 40 percent from 1963 to 1982, based on Bureau of Labor Statistics' measures. But the rate has varied markedly from year to year, tending to follow the national unemployment rate and accompanying changes in claims volume. For example, productivity was highest during the high unemployment years of 1975 and 1982 when the accompanying claims volume greatly increased; it dropped to an 8-year low in 1978 following a decrease in unemployment and accompanying claims. Likewise, our analysis indicates that productivity began declining in 1983 following the reduction in unemployment and related claims volume. The 20-year productivity trend (1963-82) is shown in appendix III.

The rate of productivity growth achieved by all 50 states, Puerto Rico, and the District of Columbia has also varied markedly. Over the past 5 years, which we measured, three states experienced a decline, while the others had increases of 2 to 65 percent. The six states we examined all had productivity increases, ranging from 9 to 62 percent. Regarding sustained performance, of the eight most productive states in 1978, four were still among the most productive in 1982. Of the 10 least productive in 1978, 8 were still among the lowest performing in 1982. (See app. VII.)

The financial benefits from this increase in productivity are substantial. As one measure, 15 states achieved productivity gains large enough to offset salary increases during the 5-year period. As another measure, administrative costs in 1982 would have been an estimated $1.7 billion rather than $1.4 billion had productivity remained at the 1978 level.

FURTHER PRODUCTIVITY IMPROVEMENTS ARE POSSIBLE BY ADOPTING BEST OPERATING PRACTICES

Notwithstanding past improvements, there are opportunities for further productivity improvement. This potential is indicated by a wide difference in productivity among both states and offices within states. Because states perform essentially the same type of activities in administering the UI program, wide variances in productivity rates indicate that some states and individual offices have found more efficient ways of operating.

Productivity variance among states

As shown below, our measures indicate that productivity among the states ranged in 1982 from 19 to 40 hours per weighted case. In other words, to perform essentially the same administrative processing steps, some states used twice as many staff hours on the average as other states. Further, this degree of separation between the most and least efficient has persisted for at least the past 5 years.

While the gap in productivity has remained rather stable, the spread in unit costs for labor between the most and least efficient states has grown from 165 to 294 percent in 1978 and 1982, respectively. This suggests that salary costs are growing more rapidly in the least efficient states.

The range in productivity and unit cost levels for all states, the District of Columbia, and Puerto Rico from 1978 to 1982 are shown below. Detailed analyses are in appendix IV.

Hours and unit labor cost variances among states

	1978	1979	1980	1981	1982
Hours per case:					
Low	26	25	21	21	19
High	56	56	48	45	40
Percent variance	115%	124%	129%	114%	111%

	1978	1979	1980	1981	1982
Unit labor cost per case:					
Low	$130	$126	$120	$129	$123
High	344	389	436	472	485
Percent variance	165%	209%	263%	266%	294%

Productivity variance among state offices

The variance in productivity among offices within the states reviewed was greater than that among states. For example, in Tennessee the gap in productivity between the most and least efficient offices was 229 percent. In other words, the least productive office took 18 hours to accomplish what the most productive office did in 5-1/2 hours. The spread in productivity in 1982 among offices within the six states examined is shown below. Detailed analyses are in appendix VI.

	Unit hours per case[a]			
State[b]	Average	Most productive	Least productive	Percent variance
Tennessee	15	5.5	18.1	229
N. Carolina	17	7.0	18.2	160
Texas	22	5.7	59.2	939
Virginia	23	7.1	28.9	307
Massachusetts	24	16.6	26.6	60
Florida	27	16.7	31.9	91

[a]Local office productivity rates do not include state level staff years and thus the hours per case are lower than the statewide rates.

[b]Interstate comparison should not be made of local office productivity. Because of differences between states in the work done by local offices and work done centrally, comparisons are only valid within states, office-by-office.

CONDITIONS CONTRIBUTING TO PRODUCTIVITY VARIANCES

ETA and state UI executives attribute the gap in productivity within and among states to various factors generally categorized

as differences in operating practices, program structure, and demographics. We observed evidence of all three within the offices and states reviewed. Much of these variations, in our opinion, are attributable to differences in operating practices that state UI management can change to increase productivity. Because of the time involved, we limited our efforts to identifying some factors contributing to productivity increases or decreases and did not attempt to determine the relative effect such factors might have on changes.

The following are presented to show that differences do exist and that some states have adopted practices that helped improve their overall productivity. The individual practices do not necessarily represent the practices states need to adopt to increase their productivity. Such practices will depend on the circumstances in each state.

Operating practices contributing to productivity variances

The following are the more notable examples of controllable operating practices that we observed which have substantive effects on processing efficiency.

--Effective use of computers.

--Matching of staff to workload.

--One-step termination notice.

These factors are discussed below.

Effective use of computers. The degree to which states use computers is an important factor in productivity and quality. All six states we reviewed had computers, but the most productive state, Tennessee, had programmed its computers to make more effective use of the computer capability. In Tennessee, local offices access the claimants' computerized file and have the computer determine eligibility and benefit amounts. Four of the other five states had the information locally to determine claimants' eligibility and benefit amounts, but for various reasons had to mail claims to the central office to have the monetary award determined.

In North Carolina, for example, local offices could not create a file for new applicants on the computer. State officials said that money to reprogram its computer to achieve this capability was not available. Sending claims to a central office will cause extra handling and processing between local and central

offices. As a rough indication of the extra work, the MPU submitted by North Carolina and Virginia for processing an initial claim was 3 to 6 minutes greater than that submitted by Tennessee; which is about 10 percent more time per case.

State UI officials pointed out that while they recognized the need for improved automation, funds were not always available. They also stated that because of technicalities in the cost model funding formula, states had a disincentive for automating their UI systems. ETA management stated that they were aware of the advantages of automation, but that budget constraints limited the availability of funds. In September 1983, ETA issued a policy and procedures for changing the funding formula and thereby reducing an obstacle to further automation. Also, on May 22, 1984, ETA granted $21 million to 20 states to assist them in automating their UI systems and procedures.

Matching of staff to workload. Adjusting staff levels to match changes in work volume is a key factor in sustaining productivity. In UI offices, the workload can fluctuate by day of the week and by season and may vary as much as 200 percent or more within a year, the adjustment is often accomplished by using part-time employees. This is illustrated by one moderately productive office that matched a 132-percent increase in workload in 1 month with a 140-percent increase in part-time hours and a 20-percent decrease in full-time hours. This office also varied the use of part-time help on a daily basis. Consistent with workload, most part-time hours were worked on mondays; the least on fridays.

Among the offices we observed, the most productive ones made extensive use of part-time employees, scheduling work hours to match office workload, and the least productive offices made less use of part-time employees. One reason for the latter was that state laws limited the flexibility in hiring and retaining part-time employees (see below). Another state had procedures that limited local office flexibility in adding staff quickly.

The use of part-time employees is a subject of much discussion and even of recent study within New York and Pennsylvania. Some state officials view part-time employees as being a very necessary part of a productive operation, while others believe such use degrades the quality of work. It seems that the different perceptions stem, in part, from the definition of "part time." If it means a person who works only a very few weeks before being replaced by another person who works only a short time, as we observed in Florida, it is likely that the quality would be lower since there is not enough time for proper training. The consequence is a succession of untrained workers.

The key, in our opinion, is to be able to hire and retain the permanent part-time employee. Thus, while the person works less than full time, he or she can gain the experience necessary to produce high quality work efficiently.

Permanent part-time employment, however, is not now possible under the laws of some states. For example, Florida allows part-time employees to work a maximum of 3 months during the year.

One-step notice of termination. Processing can be facilitated by having employers provide their employees or the UI office a notice citing the reason of termination. Such a notice saves time by eliminating the need for the local UI office to prepare and mail a form to the employer asking for confirmation of the reason for termination. It also eliminates the need for the employer to look up the information and complete the form. Additionally, it allows faster service and reduces the potential for erroneous payments. ETA officials said they encourage this, but that employers cannot be required to provide termination notices.

All the states we reviewed had arrangements for employers to provide such notices for large layoffs. The most efficient state in our review encouraged its employers to do this for all layoffs, and state officials estimated that having a termination notice saved about 10 minutes per case, or about 15 percent of processing time for regular initial claims.

Some states had arranged for employers to provide (1) application forms already completed and (2) electronic data transfer of eligibility information. A good example of this was North Carolina. It processes claims centrally using a computer based on automated tape transfer of information from employers. While electronic transfer can contribute to significant time savings, it has limited application, being useful only for large employers laying off a significant number of employees.

Program differences contributing to productivity variance

Differences in the structure of a state's UI program, which is controlled by the state legislature and not program administrators or managers, were also cited by ETA officials and state UI executives as contributing to productivity variances among states. While the scope of our onsite work was not adequate to draw firm conclusions, from a combination of the cost model data and our productivity measures, we have some observations on two program differences with potential for affecting productivity.

1. Benefit payment interval. Two of the states we reviewed pay benefits weekly rather than biweekly which requires added work and decreases productivity. GAO previously recommended that benefits be paid biweekly.[2]

2. Wage reporting. All but 10 states require employers to report quarterly the wages paid each employee. While comparison is difficult, data from the cost model indicate that for most states the cost of maintaining wage records is less than the cost incurred by states that must request wage data in processing initial claims. Requesting states must contact all the employers the claimant worked for during the benefit period to determine wages earned. States having wages reported would generally need only to contact the most recent employer. It may be coincidental, but in 1982 no non-wage-reporting state was among the 15 most efficient states. Because reported wage data are useful in verifying eligibility for the UI program and other needs based on income security programs, GAO has previously recommended legislation requiring all states to require wage reporting.[3]

Demographic conditions affecting productivity variances

State UI executives generally believe that productivity is adversely affected by demographics. The following demographic conditions were cited as contributing to low productivity within states or particular offices. Most were cited by state officials at our briefings to them on the results of our review. While not conclusive, our findings raise questions about the effect of the cited demographic conditions on productivity.

1. Servicing sparsely populated areas. It is believed that efficiency will be inhibited in states having large sparsely populated areas because they will need offices not justified by volume to provide reasonably accessible service. Extreme examples of low population density and low case volume are found in the plains and northern mountain states and large parts of Texas. Since 1978,

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[2]Millions Can Be Saved by Improving the Productivity of State and Local Governments Administering Federal Income Maintenance Assistance Programs, AFMD-81-51, June 5, 1981.

[3]Legislative and Administrative Changes To Improve Verification of Welfare Recipients' Income and Assets Could Save Hundreds of Millions, HRD-82-9, January 14, 1982.

Wyoming, Montana, North and South Dakota, Utah, New Mexico, Idaho, and Nebraska have been among the bottom third of states in productivity.[4]

While servicing sparsely populated areas is a factor to contend with, it does not preclude using efficient practices. The six states we reviewed addressed this problem by using part-time and itinerant offices.[5] The benefits are illustrated by cases in Texas and Virginia.

Two of the five most productive Texas offices in fiscal year 1982 were prior full-time offices that were converted to part time early in 1982. As an indication of their efficiency, a comparable full-time office with 687 initial claims in 1982 used 3,496 staff hours. By comparison, one of the part-time offices had 805 initial claims and used 881 staff hours--a six times higher productivity rate. A similar spread in productivity is illustrated by two offices in Virginia serving thinly populated areas. The less productive office was open 5 days a week and had a full-time manager and an assistant manager as well as three part-time workers. The more productive office was operated as an itinerant point and was open 2 days a week and staffed with two workers. The productivity levels for these two offices were 24 and 7 hours per weighted case, respectively.

While Texas has vast areas of low population, we did not review any plain or mountain states where the problem of servicing sparsely populated areas is considered to be the most severe. Thus, we do not know to what extent they use part-time and itinerant offices, nor what other approaches they are using or could use to address this service problem. This would appear to warrant examination by ETA.

2. Language barriers and transient workers. It is believed that efficiency is inhibited at offices having a large client population of transient workers and claimants that do not speak English. We did not examine this in depth, but we noted two offices, one in Texas and one in Florida, reputed to have language barriers which had among the highest productivity rates in their state. The Florida office employed spanish-speaking employees and had application forms printed in spanish.

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[4]Utah and Nebraska are non-wage-reporting states which could also adversely affect their productivity.

[5]An itinerant support point is a location served on specific days by a team from a full-time office. The office space used is normally made available by the community at no charge.

3. A large urban client population. The belief was expressed by state UI executives, although not universally, that because of added management levels and unfamiliarity with their client employers, large urban offices would be less efficient than medium size offices in more rural areas. Our measures, however, do not show any consistent relationship between office size and productivity. The productivity measures for offices in the six states we reviewed showed large, medium, and small offices with both the highest and lowest productivity levels within their respective states. (See app. VI.)

HIGH PRODUCTIVITY AND TIMELINESS APPEAR COMPATIBLE; THE RELATIONSHIP TO PAYMENT ERRORS IS UNCERTAIN

We also examined the relationship of timeliness and payment accuracy to productivity because emphasis on any one could exert countervailing pressure on the others. On timeliness, Labor has standards (goals) on how quickly work should be completed. For example, the most productive states reported a slightly better performance than the least productive in meeting Labor's goal on how quickly the first benefit payment is made. All but four states reported meeting or exceeding the goal. (See app. VIII.)

The volume of benefit payments of the wrong amount or to ineligible recipients is a matter of considerable concern. ETA emphasizes payment accuracy and is testing, but does not have, comparable measures of payment errors.[6] Without measures, we cannot draw a firm conclusion about the relationship between payment accuracy and productivity. Labor's recent directive to establish a quality control system addresses the need for measures of payment accuracy.

BENEFITS CAN BE REALIZED FROM PRODUCTIVITY GAINS

The benefits from improving productivity could result in (1) freeing funds that could be used for other system improvements or (2) eventually lowering employer taxes. For example, if the lower performing states could improve productivity to become 85 percent as productive as the most efficient states, and not decrease their payment accuracy, about $140 million in labor costs annually could be available for other use in the system. This computation is based on the 1982 productivity levels we calculated for all states

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[6]An Assessment of Random Audit--a New Department of Labor Program To Improve the Accuracy of Unemployment Insurance Benefit Payments, GAO/HRD-84-26, March 30, 1984.

plus the District of Columbia and Puerto Rico. The $140 million represents about 20 percent of the salary administrative costs for fiscal year 1982. (See app. IX for details.)

We believe such improvement is a realistic goal because the most productive states have the potential for improvement by adopting statewide the practices used at the most efficient offices within their states. For example, case processing time between offices in one of the most efficient states (Tennessee) ranged from 5.5 to 18 hours per weighted case. This results in an approximate cost of $35 and $114 per weighted case, respectively, a sizable difference.

A COMPREHENSIVE APPROACH NEEDED FOR FURTHER PRODUCTIVITY IMPROVEMENTS

In a prior study on productivity management, GAO identified four common elements for an effective productivity improvement program.[7] These are top-level management support, an improvement plan built on goals and meaningful measures, an ongoing activity to identify efficient management and processing practices, and mechanisms to hold managers accountable for implementing the identified best practices. Taken together, these elements would represent a thorough managerial approach to achieving productivity improvements.

Although ETA has some of these elements in place and has achieved productivity increases in the UI program by reducing administrative funding, a more comprehensive approach may be needed to assist states in achieving the magnitude of benefits suggested in the previous section. Other public and private organizations, outside the federal government, have found such an approach necessary to establish productivity as a key management objective and to identify targets of opportunity for improving productivity.

ETA management supports productivity improvements and its funding mechanism is adequate to hold states accountable. ETA, however, does not have a comprehensive plan for improving productivity to put its management support into action. It has not established improvement goals with each state nor developed productivity and unit cost measures to compare states' performance

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[7]The elements of an effective productivity improvement effort were identified after examining the formal productivity management efforts at six companies and several state and local governments, reviewing relevant literature, and meeting with productivity experts. Increased Use of Productivity Management Can Help Control Government Costs, GAO/AFMD-84-11, November 10, 1983.

and track each state's performance against its goals and prior performance. Also, ETA does not have a group actively working with states to identify and disseminate among states information on efficient management and processing practices. ETA's approach of reducing administrative funds forces most states to improve their productivity level, but it does not provide states with incentives to search out and make improvements which will result in savings below the federal funding level.

ETA receives from states the data needed to develop productivity and unit cost measures. In addition to their use in tracking and comparing performance among states and against goals, such measures can indicate where the states can look for efficient operating practices. Such measures also can be used along with existing timeliness measures and quality measures being developed, to monitor all three facets of performance, promote complementing improvements, and assess administrative funding requirements.

In the past, ETA sponsored periodic ad hoc projects to improve administrative efficiency. ETA also holds periodic meetings with the states to discuss problems and improvements to the UI system. These efforts, while useful, are limited and less systematic than a comprehensive approach which would identify management and processing practices that will increase productivity and disseminate these best practices among the states.

ETA officials stated that in the past they had attempted to deal with productivity in a number of different ways and each attempt met with limited success. They stated that, while productivity improvement is important, a multitude of recent events, such as the cyclical unemployment swings, legislative changes to the UI program, and staff limitations, have inhibited a more forceful move in this area.

The UI program does not provide states with incentives to improve efficiency below the federally funded level. Since the administrative costs are 100 percent federally funded, cost savings accrue to the federal government. Further, if states reduce their costs by using less staff hours than they earn, Labor reimburses them only for the hours used (see app. X). The system, however, does have several provisions built into the administrative funding process to help ensure that states stay within their budgeted levels. For example, work is allocated a certain amount of time (MPU), which encourages states to sustain their existing level of efficiency to avoid financing the additional costs with state funds.

There are no incentives, however, for the states to improve their performance and reduce costs below the federally established funding levels. Most, nonetheless, have improved productivity in periods of increasing workloads. Some state UI executives have complained about the lack of financial incentives for making productivity improvements. In this regard, ETA officials, while agreeing that there are merits to providing incentives for improving productivity, are not sure what would be effective, equitable, and politically acceptable.

CONCLUSIONS

Productivity improvements of the magnitude our study suggest could provide substantial benefits to the UI program. Although ETA has had periodic projects to improve productivity, these efforts, while beneficial, were not part of a comprehensive productivity improvement strategy. We recognize that the UI program is a federal/state partnership and that the states have considerable authority to determine how their programs are designed and operated. Given the potential benefits, however, we believe that Labor, in cooperation with the states, should formulate a comprehensive plan to promote productivity improvements, along with quality, in the UI system.

We believe ETA needs to adopt an approach to work cooperatively with states to identify and disseminate best operating practices, including the most effective methods of automation. This will necessitate joint onsite examination of state operations. While we recognize that efforts to improve productivity may require increased outlays for automation, automation of many UI functions has been shown to be cost effective in reducing the number of staff and producing quality improvements.

Furthermore, as suggested in the previous section, financial incentives may be necessary for the states to improve their performance and reduce costs below existing funding levels. The value of financial incentives has long been recognized as an effective means for fostering improved performance. We recognize, however, that financial incentives are little used in federal assistance programs, thus there is little practical experience to draw upon. Therefore, the Department of Labor may wish to develop several projects to assess the potential benefits and determine which types of incentives would be most suitable for promoting state adoption of the best management and processing practices.

RECOMMENDATIONS

We recommend that the Secretary of Labor direct ETA to develop a plan for improving productivity in administering the UI program to include, among important elements,

--measures of productivity and unit costs,

--improvement goals, and

--an approach for identifying and disseminating among states information of best management and processing practices to improve productivity.

The Secretary should also direct ETA to assess the potential benefits and determine which type of financial incentives would be most suitable to promote state adoption of best management practices.

METHODOLOGY FOR MEASURING PRODUCTIVITY

Productivity is normally expressed as a ratio of output produced to input required to produce it. This ratio is normally computed and expressed over a period of time as a productivity index. To compute this index requires measuring the change in output from year to year compared to the change in input from year to year. The comparison of this relationship is expressed as a productivity index, which uses a selected base year and expresses a gain or loss in productivity relative to this base year. Our procedures for computing productivity trends are described on the next page.

We used the process illustrated to compute productivity trends for individual states for fiscal years 1978-82 and for each office in six states for fiscal year 1982. The results of these computations are shown in appendix III.

PROCEDURES FOR COMPUTING PRODUCTIVITY TRENDS

$\frac{\text{Output (Year subsequent to base)}}{\text{Output (Base year)}} \times 100$--To produce subsequent year output index

$\frac{\text{Input (Year subsequent to base)}}{\text{Input (Base year)}} \times 100$--To produce subsequent year input index

Output and input indexes in the base year are expressed as 100, and therefore, productivity in the base year is expressed as:

$$\frac{\text{Output index}}{\text{Input index}} \times 100$$

Productivity index in a year subsequent to the base is:

$$\frac{\text{Output index subsequent year}}{\text{Input index subsequent year}} \times 100$$

To illustrate, assume:

Base year 1978
Base year output - 200 units
Base year input - 5 staff years
Subsequent year 1982

Subsequent year output - 500 units
Subsequent year input - 10 staff years

$$\text{Output index} = \frac{500}{200} = 2.5 \times 100 = 250 \text{ (150-percent increase)}$$

$$\text{Input index} = \frac{10}{5} = 2.0 \times 100 = 200 \text{ (100-percent increase)}$$

$$\text{Productivity index} = \frac{250}{200} = 1.25 \times 100 = 125 \text{ (25-percent increase)}$$

This information tells us that we have had a 150-percent increase in output with only 100-percent increase in input to produce it; therefore, productivity has increased by 25 percent.

The example shown assumes a single output being produced which is normally not the case. In the case of the UI program, the Department of Labor has identified 17 primary products applicable to the benefit determination process, which it rolls into 4 summary level products for its present cost model budget allocation system. In addition the tax, wage record, and eligibility review interview functions constitute separate products. In developing our measures, we have used the tax product plus 11 of the 17 benefit determination products. The table below shows the products used and not used in developing our measures. As explained later, we also added workload outputs for the extended benefit program for the 5 years covered by our measures. Therefore, we ultimately used a total of 14 products.

Output Work Products in Labor's Cost Model

Included in our measures[a]	Excluded from our measures
Initial claims	**Nonmonetary determination**
Regular (new)	Intrastate - regular claim
Federal employees	Separation
Exmilitary personnel	Nonseparation
Intermittent[b]	Interstate
Interstate agency (processing state)	Separation
Interstate liable (paying state)	Nonseparation
Extended benefits	
	Appeals
Weeks claimed	Interstate agent (processing state)
Regular	Interstate liable (paying state)
Interstate agency	
Interstate liable	
Extended benefits	

Appeals
Lower authority
Higher authority

Tax collection

Wage record

Eligibility review interview

[a]Summary level products are underlined. These are weighted and used as "broad band" products by Labor for fund allocation.

[b]Claims, subsequent to the initial claim, made by a person who goes on and off the rolls during an established benefit period.

REASONS FOR EXCLUDING CERTAIN OUTPUTS FROM OUR MEASURES

The following reasons explain why certain products identified by Labor were excluded from our productivity and unit cost measures.

Nonmonetary determinations. The nonmonetary determination workload was not used because in two of the six states we reviewed there were problems with the workload counts. Also, it is an intermediate processing step and not a true output product.

Eligibility review interview. This product represents the time for conducting the in-person interview to determine if a claimant is still eligible. Although there is an MPU for this activity, the workload is funded as part of the week's claimed activity. We found that what constitutes an interview is inconsistently defined by states. Labor is aware of this and thus does not use this MPU for allocating funds.

Appeals. The workload count for interstate liable appeals cases (appeals for cases where benefits are paid by another state) was the same as the workload count for the appeals to lower authority. We could not clarify whether the interstate liable appeals workload was included in the lower authority workload. But since this seemed to be the case, we used only the lower authority and higher authority appeals data.

Wage record. Since all states do not have the wage record function, we eliminated both the output and the associated input data for the function. Except, we added the output and input for 1982 to test the effect on productivity.

APPENDIX II

WEIGHTING THE OUTPUTS

Since we have used multiple unlike products as output in deriving our output index, we could not simply add the quantities of each in order to get the quantity produced. We had to introduce a technique known as "weighting" in order to derive an equivalent production for each state for each year. Simply stated, weighting involves determining the relative difficulty, in terms of staff hours used, to complete each output product. In computing weights, we used cost model information submitted by the states to Labor. Annually, each state provides Labor the MPU it uses to process each of 17 cost model work products it performs. Our calculation of the (1) output weights and (2) weighted output quantities (for states and state offices) is shown on the following two pages. Actual numbers for Virginia are used as an example in illustrating our calculation of weighted output quantities.

Computation of Output Weights

Work products	MPU[a]	Output weight[b]
Initial claims:		
Regular (new)	66.95	.0452
Federal employees	136.42	.0922
Military personnel	83.53	.0564
Intermittent	20.25	.0137
Interstate agent	43.12	.0291
Interstate liable	42.38	.0286
Extended benefits	25.00[c]	.0168[c]
Weeks claimed:		
Intrastate	7.98	.0054
Interstate agent	8.0	.0054
Interstate liable	7.71	.0054
Extended benefits	8.00[c]	.0054[c]
Appeals:		
Lower authority	321.78	.2174
Higher authority	741.94	.5013
Tax collection	170.60[c]	.1152[c]
Total	1,480.06	1.0000

[a]The MPU column was derived by averaging for each work product (output) the MPU from cost model data submitted by the states for fiscal year 1983.

[b]The output weight column was derived by dividing the average MPU of each work product by the total MPU (i.e., 66.95 ÷ 1,480.06 = .0452).

[c]Not summed in the total. We added these work products subsequent to computing the original weights and productivity measures. Rather than recompute the output weights and all the measures, we calculated output weights for these work products using MPUs from the cost model as follows.

Extended benefits - initial claims (25 ÷ 1,480.06 = .0168). Extended benefits - weeks claimed (8 ÷ 1,480.06 = .0054). Tax collection (170.6 ÷ 1,480.06 = .1152).

Computation of Weighted Output Quantities Using Actual Virginia Output Figures

Output products	Weight	Output quantity[a]	Weighted output (col. 1 x col. 2)
	(1)	(2)	(3)
Initial claims:			
Regular (new)	.0452	265,094	11,982
Federal employees	.0922	2,488	229
Exmilitary personnel	.0564	2,694	152
Intermittent	.0137	296,654	4,064
Interstate agent	.0291	18,898	550
Interstate liable	.0286	23,591	675
Extended benefits	.0168	541	9
Weeks claimed:			
Regular	.0054	2,221,771	11,998
Interstate agent	.0054	283,377	1,530
Interstate liable	.0054	125,239	664
Extended benefits	.0054	1,793	10
Local output sum			31,863
Appeals:			
Lower authority	.2174	13,941	3,031
Higher authority	.5013	2,612	1,309
Tax collection	.1152	109,404	12,603
State output sum			48,806

[a]Figures obtained from Labor computer reports for Virginia fiscal year 1982.

PRODUCTIVITY TRENDS, 20-YEAR TRENDS FOR THE OVERALL PROGRAM AND 5-YEAR TRENDS BY STATE

TRENDS FOR THE PROGRAM

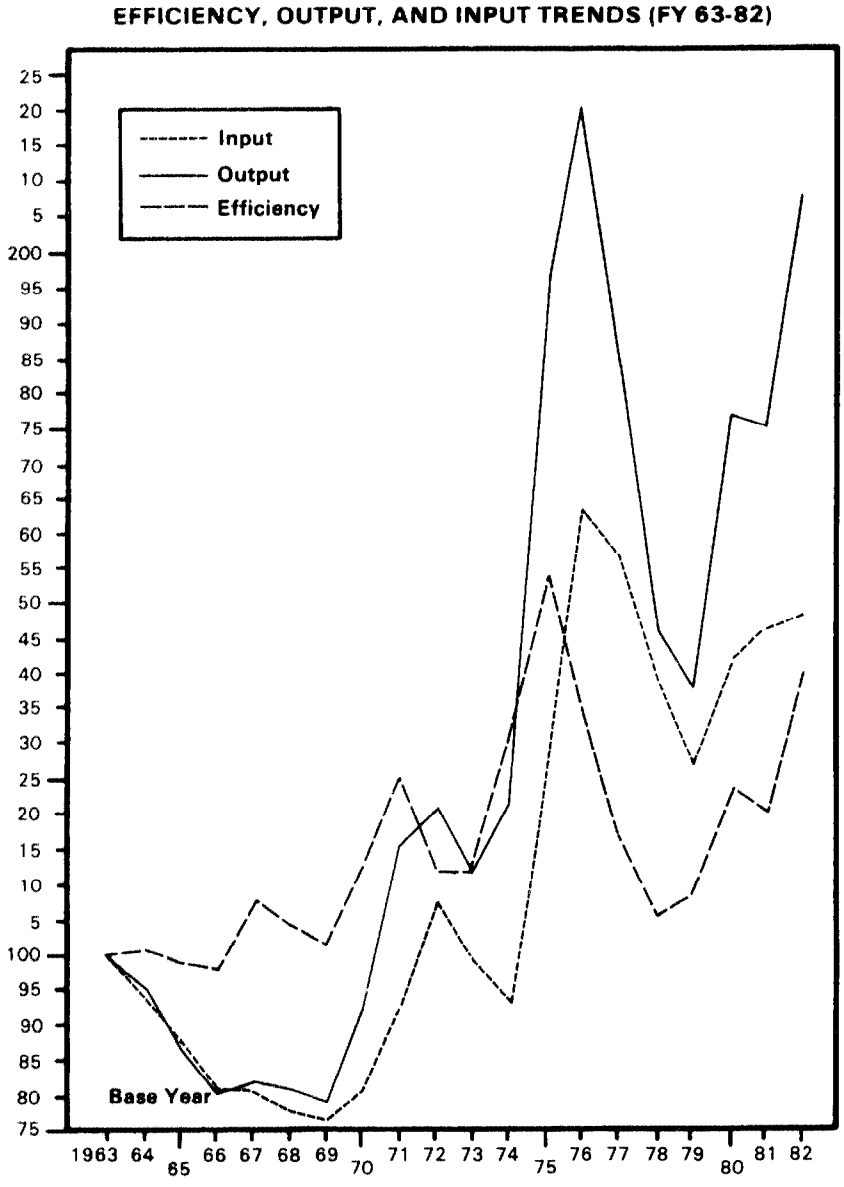
The graph on the next page shows the 20-year productivity trend for the UI program. This is based on measures constructed by the Bureau of Labor Statistics. As seen in the graph, administrative efficiency has improved by 40 percent since 1963, but there has not been a steady positive trend. Rather, efficiency levels have vacillated, tending to mirror changes in the workload volume. Productivity was highest in 1975.

It is difficult to isolate the causes for these variances, but there is a close relationship between productivity changes and changes in output. Dramatic increases in output have normally been coupled with improved efficiency, while the inverse has been true when output declined. For example, productivity increased by about 18 percent in fiscal year 1975 following an increase in output, and it dropped by about 45 percent in the next 3 years (1976-78). At the end of 1978 productivity was only 6 percent higher than it had been 15 years earlier. With a new surge in output, productivity increased by 32 percent during fiscal years 1980-82 to a level of about 40 percent above the 1963 level.

One notable exception to this mirror relationship of productivity and workload came between 1975 and 1976 when output increased, but efficiency declined. This may have happened as a result of a continuation in personnel increases which started during the 1974-75 period. At that time output was increasing so rapidly that perhaps states were trying to "catch up" in 1976. Although the output increased, it did so at a much lesser rate than did personnel and thus the decline in efficiency resulted.

Three important messages can be read from the close relationship between claims volume and productivity. First, the level of real structural productivity growth to 1979 appears to have been relatively small. This is illustrated by the collapse in productivity to between 6 and 9 percent above the base in 1978 and 1979 when the claims volume declined. Second, it suggests that states are not quickly adjusting staffing to match changes in workload. Staff are not quickly added as work increases, nor quickly dropped as work decreases. Third, it reveals that states' processing times (MPU) approved for funding are not updated to reflect the lower actual times achieved (as reflected by the increase in productivity rates). For example, for one reporting period in 1982 all but one of the offices in Tennessee

was earning more staff hours than it was using. Hence, states can revert to their approved processing times when work declines and still earn the funds to sustain their staff levels.



[a]Productivity and efficiency are synonymous in this report.

[b]Index numbers represent productivity levels at points in time corresponding to a specific base year. The base year is established as 100. Therefore, the change between the base and a subsequent year can be determined by relating the subsequent year index to the base year. (An index of 110 means a 10-percent increase.)

TRENDS BY STATE

Information was not available to show the trends for specific states over the entire 20-year period beginning in 1963, but it was available for the fiscal year 1978-82 period. The chart on page 26 displays this for 1978-82 for all states in both hours and dollars. For the productivity index based on hours we used total hours expended in the UI program at both the local and state office levels for producing the measured outputs. The index based on dollars uses direct salary costs (excluding benefits) corresponding to the labor hours data used. The use of the dollar figures allows us to see whether productivity gains have been sufficient to cover the salary increases. For the years where input data were missing we have assumed the same input as shown for the first year data were available. This means that the productivity for these years is the same as the output index (see app. III, p. 28).

Productivity indexes based on hours show that all but three states experienced productivity gains over the 5-year period. These gains ranged from 65 to 2 percent. The index based on dollars shows that 12 states (those with indexes in 1982 of over 100) experienced productivity gains which were large enough to offset salary increases. In Indiana, Maryland, and North Carolina, productivity gains were large enough to yield a 20 plus percent gain in productivity over and above salary increases.

APPENDIX III

Chart of Productivity and Output Changes--Fiscal Years 1978-82[a]

State	Productivity index-hours, Fiscal year 1978	1979	1980	1981	1982	Output index, Fiscal year 1978	1979	1980	1981	1982
Wyoming	100	101	118	127	165	100	103	133	165	237
North Carolina	100	108	137	135	162	100	98	145	153	215
Idaho	100	103	112	122	159	100	108	140	135	177
Louisiana	100	107	122	123	150	100	97	111	118	155
Indiana	100	116	134	136	148	100	110	179	155	184
Iowa	100	98	114	119	145	100	98	126	128	158
Maryland[c]	100	96	112	121	144	100	96	112	115	137
Arkansas	100	112	135	123	140	100	102	126	123	139
Tennessee	100	109	128	129	139	100	109	134	135	165
New Hampshire	100	106	121	136	139	100	100	130	132	150
Arizona	100	97	108	114	139	100	89	117	126	160
Nevada	100	101	112	126	138	100	99	120	142	166
Texas	100	109	115	110	136	100	104	121	123	146
Washington	100	98	115	119	135	100	88	115	129	157
Mississippi	100	113	123	122	135	100	105	140	153	191
Wisconsin	100	108	120	119	134	100	104	147	146	170
Minnesota	100	104	124	122	134	100	96	126	129	154
South Carolina	100	97	130	116	133	100	95	139	147	213
Montana	100	101	111	109	133	100	96	114	110	128
Colorado	100	110	110	110	132	100	96	111	120	143
Ohio	100	108	115	123	131	100	108	170	155	194
Utah	100	104	119	119	130	100	103	127	134	163
Massachusetts	100	111	122	118	130	100	92	95	99	109
North Dakota	100	100	122	118	129	100	99	117	110	124
Kentucky	100	103	122	116	129	100	103	143	145	155
Oregon	100	106	119	116	128	100	102	136	150	174
New Mexico	100	100	109	113	126	100	97	112	120	134
Oklahoma	100	105	107	103	125	100	102	122	113	151
Kansas[b]	100	95	112	110	125	100	95	125	124	156
Florida	100	110	116	112	123	100	90	101	105	122
Alabama	100	108	115	109	122	100	105	133	130	148
California	100	103	102	107	121	100	91	103	110	130
West Virginia	100	96	109	115	120	100	102	130	143	133
New Jersey	100	119	114	111	120	100	105	106	102	102
Michigan	100	115	127	110	120	100	106	181	141	151
Vermont	100	93	100	107	119	100	91	111	110	125
South Dakota	100	107	108	112	118	100	109	110	114	117
Illinois	100	98	104	108	115	100	94	119	130	139
Nebraska	100	96	100	104	114	100	87	108	113	122
Maine[b]	100	94	98	100	110	100	94	103	104	102
Alaska	100	98	100	106	110	100	80	72	75	76
Virginia	100	104	106	97	109	100	104	124	127	151
Hawaii[b]	100	90	92	95	108	100	90	101	100	109
Pennsylvania	100	107	112	96	107	100	97	114	103	124
Georgia	100	103	112	98	107	100	100	121	118	146
New York	100	102	103	97	105	100	89	91	84	84
Connecticut	100	84	97	90	104	100	84	94	92	102
Missouri	100	92	101	94	102	100	97	127	127	128
Puerto Rico[b]	100	96	96	101	103	100	96	98	106	113
Rhode Island	100	84	88	84	98	100	73	80	75	82
Delaware	100	90	98	99	97	100	97	109	114	118
District of Columbia[d]	100	94	96	99	94	100	94	96	99	111
Total (United States)	100	104	112	110	124	100	97	119	118	136

[a]The indexes shown are for state total personnel hours and salary dollars. In expressing productivity trends, the initial year is equated to 100 and subseqent year numbers show as percent changes from the base.

[b]Input data were not available for fiscal year 1978, and therefore, we used the fiscal year 1979 input for both fiscal years 1978 and 1979.

[c]Input data were not available for fiscal years 1978 and 1979, and therefore, we used the fiscal year 1980 input for fiscal years 1978, 1979, and 1980.

[d]Input data were not available for fiscal years 1978, 1979, and 1980, and therefore, we used the fiscal year 1981 input for fiscal years 1978-81.

Significance of large states on national productivity statistics

States with very high workloads have an especially significant role in the national trends. The workload of the five states having the largest workload equals about 36 percent of the national total. Thus, their efficiency should be considered in any trend analysis. The chart below shows the trends for these five states.

State	Productivity trends				
	1978	1979	1980	1981	1982
California	100	103	102	107	121
Illinois	100	98	104	108	115
Michigan	100	115	127	110	120
New York	100	102	103	97	105
Pennsylvania	100	107	112	96	107
5 state average	100	105	110	104	114
National average	100	104	112	110	124

As the above chart shows, these states have experienced efficiency trends less than the national average. Thus, they exerted a downward influence on the national average.

RELATIONSHIP OF CHANGES IN STATES WORKLOAD AND PRODUCTIVITY

Examination of state-by-state productivity increases and workload increases for the measured 5-year period shows, as in the national trends, that there is a correlation between productivity changes and output changes, but a little less strong. (Productivity and output changes for fiscal years 1978-82 are shown in the chart on p. 28.) For example:

--Of the 26 states having the largest productivity increase, 18 had an output increase of over 50 percent.

--Of the 26 states with the lowest productivity increase, 4 had an output increase over 55 percent.

--The average rate of output increase was 64 percent for the 26 states with the largest productivity gain and 22 percent for the 26 states with the lowest productivity gain.

APPENDIX III

Productivity Index Trends[a]

State	Productivity index-hours, Fiscal year 1978	1979	1980	1981	1982	Productivity index-dollars, Fiscal year 1978	1979	1980	1981	1982
Wyoming	100	101	118	127	165	100	91	93	94	108
North Carolina	100	108	137	135	162	100	97	118	109	125
Idaho	100	103	112	122	159	100	96	97	91	110
Louisiana	100	107	122	123	150	100	98	95	87	99
Indiana	100	116	134	136	148	100	105	123	117	121
Iowa	100	98	114	119	145	100	91	99	97	106
Maryland[c]	100	96	112	121	144	100	96	112	110	126
Arkansas	100	112	135	123	140	100	101	118	103	101
Tennessee	100	109	128	129	139	100	99	108	100	106
New Hampshire	100	106	121	136	139	100	98	108	114	105
Arizona	100	97	108	114	139	100	87	93	89	101
Nevada	100	101	112	126	138	100	94	94	101	95
Texas	100	109	115	110	136	100	100	99	84	90
Washington	100	98	115	119	135	100	91	100	99	104
Mississippi	100	113	123	122	135	100	105	112	106	107
Wisconsin	100	108	120	119	134	100	99	101	95	97
Minnesota	100	104	124	122	134	100	95	109	99	96
South Carolina	100	97	130	116	133	100	86	106	94	100
Montana	100	101	111	109	133	100	94	99	89	96
Colorado	100	110	110	110	132	100	97	93	85	88
Ohio	100	108	115	123	131	100	100	104	110	100
Utah	100	104	119	119	130	100	94	103	97	96
Massachusetts	100	111	122	118	130	100	103	98	103	98
North Dakota	100	100	122	118	129	100	90	102	82	81
Kentucky	100	103	122	116	129	100	92	107	96	93
Oregon	100	106	119	116	128	100	98	110	100	100
New Mexico	100	100	109	113	126	100	92	93	87	88
Oklahoma	100	105	107	103	125	100	99	95	82	81
Kansas[b]	100	95	112	110	125	100	95	103	91	95
Florida	100	110	116	112	123	100	99	100	91	95
Alabama	100	108	115	109	122	100	95	105	85	92
California	100	103	102	107	121	100	97	87	83	87
West Virginia	100	96	109	115	120	100	93	102	97	86
New Jersey	100	119	114	111	120	100	109	96	85	81
Michigan	100	115	127	110	120	100	106	115	90	86
Vermont	100	93	100	107	119	100	87	93	89	93
South Dakota	100	107	108	112	118	100	99	93	90	87
Illinois	100	98	104	108	115	100	90	91	89	84
Nebraska	100	96	100	104	114	100	86	82	78	77
Maine[b]	100	94	98	100	110	100	94	85	81	80
Alaska	100	98	100	106	110	100	89	78	72	71
Virginia	100	104	106	97	109	100	96	95	80	81
Hawaii[b]	100	90	92	95	108	100	90	88	81	84
Pennsylvania	100	107	112	96	107	100	98	99	80	82
Georgia	100	103	112	98	107	100	94	95	79	81
New York	100	102	103	97	105	100	94	91	79	74
Connecticut[b]	100	84	97	90	104	100	84	86	75	78
Missouri	100	92	101	94	102	100	82	88	77	78
Puerto Rico[b]	100	96	96	101	103	100	96	92	93	97
Rhode Island	100	84	88	84	98	100	79	78	68	73
Delaware	100	90	98	99	97	100	86	87	84	78
District of Columbia[d]	100	94	96	99	94	100	94	96	99	85
Total (United States)	100	104	112	110	124	100	97	98	89	91

[a]The indexes shown are for state total personnel hours and salary dollars. In expressing productivity trends, the initial year is equated to 100 and subseqent year numbers show as percent changes from the base.

[b]Input data were not available for fiscal year 1978, and therefore, we used the fiscal year 1979 input for both fiscal years 1978 and 1979.

[c]Input data were not available for fiscal years 1978 and 1979, and therefore, we used the fiscal year 1980 input for fiscal years 1978, 1979, and 1980.

[d]Input data were not available for fiscal years 1978, 1979, and 1980, and therefore, we used the fiscal year 1981 input for fiscal years 1978-81.

COMPARATIVE ANALYSIS OF EFFICIENCY LEVELS

LEVELS OF EFFICIENCY

Productivity data are normally expressed as trends over time as discussed above; however, comparing trends between states gives only a partial picture of productivity variance among the states. We therefore need to also look at the level of productivity in each of the various states and make comparisons of these levels. Levels are unit measures of processing efficiency in terms of hours or dollars per weighted case.

As we looked at productivity levels, we chose to rely more heavily on hours than on the dollar cost. We did this mainly because of possible differences in the salary rates from state to state. These salary rate differences could be distorting for comparative purposes unless adjustment factors were applied to mitigate regional salary variances.

In computing productivity levels, we used basically the same information used to develop trends. The difference is we do not compute indexes, but use actual input and output quantities to determine time to produce a single weighted output unit for each individual year. For example, we see that for fiscal year 1982 Tennessee used 1,331,732 staff hours to produce 68,591 equivalent units of output. By dividing the staff hours by the units of output we arrive at the productivity level-hours per weighted output.

$$\frac{1,331,732}{68,591} = 19 \text{ hours per weighted output}$$

In computing levels we developed separate computations for

--local office productivity,

--state direct productivity (e.g., appeals and tax collection), and

--total state productivity which is comprised of adding the first two plus indirect personnel hours.

In terms of levels by individual states, the charts on pages 43 and 44 show the average hours per weighted output for "local office" and "total state" for fiscal years 1978 and 1982. The following shows the 1982 productivity levels for the six states included in our review.

State	Average of local office hours per weighted case	Total of state hours per weighted case
Tennessee	15	19
North Carolina	17	21
Texas	22	24
Virginia	23	25
Massachusetts	24	27
Florida	27	31

Analyses of the charts below show that the variances in productivity rates among the states is appreciable and has persisted for at least the past 5 years. In 1978 there was a 115-percent variation in productivity between the most and least efficient states (from 26 to 56 hours per weighted case). In 1982 this variation was 110 percent (from 19 to 40 hours per weighted case). What this means is that Tennessee, one of the most efficient states, produced the same amount of output in 19 hours that it took South Dakota, one of the least efficient states, 40 hours to produce. The difference in labor unit costs between the two states was even greater ($123 and $298, respectively).

The variance in unit costs between the most and least efficient states is wider than the variance in productivity, and the gap has grown considerably during the past 5 years from 165 to 294 percent. An analysis of this variance in hours and unit costs per case is shown below.

Hours Per Weighted Output

	Local office				State total			
Year	Variance	High	Low	Average	Variance	High	Low	Average
1978	128%	41	18	27.3	115%	56	26	33.6
1979	175	44	16	26.2	124	56	25	31.9
1980	242	41	12	24.1	129	48	21	29.7
1981	160	39	15	25.3	114	45	21	30.2
1982	131	30	13	22.4	111	40	19	27.0

Labor Costs Per Weighted Output

	Local office				State total			
Year	Variance	High	Low	Average	Variance	High	Low	Average
1978	182%	$248	$88	$150.78	165%	$344	$130	$201.82
1979	199	272	91	155.59	209	389	126	208.66
1980	300	288	72	151.60	263	436	120	205.30
1981	261	321	89	171.29	266	472	129	225.55
1982	278	344	91	169.03	294	485	123	222.73

APPENDIX IV

Efficiency Levels in Fiscal Year 1978

Local office		Total state	
State	Unit hours	State	Unit hours
Arkansas	18	Delaware	26
Delaware	19	Kentucky	27
Kentucky	20	Illinois	27
Tennessee	21	Tennessee	27
Virginia	22	Virginia	27
Illinois	22	Arkansas	28
Georgia	23	Georgia	28
Indiana	23	South Carolina	29
Missouri	23	Missouri	30
West Virginia	24	Oklahoma	30
South Carolina	24	Pennsylvania	30
Puerto Rico	25[a]	Connecticut	31[a]
Iowa	25	Rhode Island	31
Rhode Island	25	Puerto Rico	31[a]
Kansas	26[a]	Louisiana	31
Michigan	26	Iowa	31
Connecticut	27[a]	Alabama	31
Alaska	27	Kansas	33[a]
Maine	27[a]	California	33
Oklahoma	27	Indiana	33
Pennsylvania	27	North Carolina	33
Texas	28	Texas	33
New York	28	West Virginia	33
North Carolina	28	Ohio	34
California	28	Alaska	35
Alabama	29	Massachusetts	35
Louisiana	29	Michigan	35
North Dakota	29	New York	35
Ohio	29	Wisconsin	35
Wisconsin	29	Maine	36[a]
Florida	31	Colorado	38
New Hampshire	31	Florida	38
Oregon	32	Minnesota	38
New Mexico	32	New Jersey	38
Mississippi	32	Mississippi	39
Minnesota	32	Oregon	40
Massachusetts	32	Washington	41
Montana	33	Hawaii	42[a]
Vermont	33	Nevada	42
Washington	33	Nebraska	43
Nevada	34	Arizona	43
Arizona	34	New Hampshire	44
New Jersey	35	New Mexico	44
Hawaii	36[a]	North Dakota	45
South Dakota	37	Utah	46
Utah	38	Vermont	48
Idaho	38	South Dakota	48
Colorado	39	Montana	49
Nebraska	40	Idaho	51
Wyoming	41	Wyoming	56
Maryland	NA[b]	Maryland	NA[b]
District of Columbia	NA[b]	District of Columbia	NA[b]

[a]Input data were not available for fiscal year 1978; therefore this is the fiscal year 1979 level.

[b]Data are not available for fiscal years 1978 or 1979.

Efficiency Levels in Fiscal Year 1982

Local office		Total state	
State	Unit hours	State	Unit hours
Arkansas	13	Tennessee	19
Iowa	15	Arkansas	20
Tennessee	15	Iowa	21
Kentucky	16	Kentucky	21
North Carolina	17	Louisiana	21
South Carolina	17	North Carolina	21
Indiana	18	Indiana	22
Louisiana	18	South Carolina	22
Illinois	19	Illinois	24
Kansas	19	Maryland	24
Oklahoma	19	Texas	24
Delaware	20	Connecticut	25
Maryland	20	Oklahoma	24
Connecticut	21	Kansas	25
District of Columbia	21	Virginia	25
West Virginia	21	Alabama	26
Alabama	22	District of Columbia	26
Georgia	22	Ohio	26
Maine	22	Wisconsin	26
Ohio	22	California	27
Texas	22	Delaware	27
Wisconsin	22	Georgia	27
Missouri	23	Massachusetts	27
North Dakota	23	Pennsylvania	28
Virginia	23	West Virginia	28
Wyoming	23	Colorado	29
Alaska	24	Michigan	29
California	24	Minnesota	29
Idaho	24	Missouri	29
Massachusetts	24	Mississippi	29
Minnesota	24	Puerto Rico	29
Mississippi	24	Nevada	30
Pennsylvania	24	Arizona	31
Michigan	25	Florida	31
New Hampshire	25	Maine	31
Nevada	25	New Jersey	31
Puerto Rico	25	Oregon	31
Arizona	26	Washington	31
Colorado	26	Alaska	32
New Jersey	26	Idaho	32
New York	26	New Hampshire	32
Oregon	26	Rhode Island	32
Florida	27	New York	33
Montana	27	Wyoming	34
New Mexico	27	Hawaii	35
Rhode Island	27	North Dakota	35
Utah	27	New Mexico	35
Washington	27	Utah	35
Vermont	28	Montana	37
Hawaii	29	Nebraska	38
South Dakota	29	South Dakota	40
Nebraska	30	Vermont	40

Another important point learned from the data is that the states with the highest productivity at the local level also had the highest productivity at the state personnel total level. As shown by the following chart, the average increase in state personnel hours for the 14 most productive states was 4.6 hours per weighted claim; for the 14 least productive it was 8.6. This indicates that the good local rates are not being accomplished by shifting hours charged to the state level.

Analysis of Hours Added at the State for Most and Least Efficient States

Most Productive States

State	Hours per weighted case		
	Local	Total	State add-on
Tennessee	15	19	4
Arkansas	13	20	7
Iowa	15	21	6
Kentucky	16	21	5
Louisiana	18	21	3
North Carolina	17	21	4
Indiana	18	22	4
South Carolina	17	22	5
Illinois	19	24	5
Oklahoma	19	24	5
Maryland	20	24	4
Texas	22	24	2
Connecticut	21	25	4
Kansas	19	25	6
			64

Average state add-on 64 ÷ 14 = 4.6

Least Productive States

State	Hours per weighted case		
	Local	Total	State add-on
Alaska	24	32	8
Idaho	24	32	8
New Hampshire	25	32	7
Rhode Island	27	32	5
New York	26	33	7
Wyoming	23	34	11
Hawaii	29	35	6
North Dakota	23	35	12
New Mexico	27	35	8
Utah	27	35	8
Montana	27	37	10
Nebraska	30	38	8
South Dakota	29	40	11
Vermont	28	40	12
			121

Average state add-on 121 ÷ 14 = 8.6

ANALYSIS OF COSTS

Although we relied more heavily on hours in our analysis, we also gave consideration to costs. We looked at salary costs, other costs, and total costs and their relation to productivity. A comparison of hours per weighted output to total cost for the six states included in our review is shown below; a comparison for all states is shown on page 38.

State	State total hours per weighted case	Total unit cost per weighted case
Tennessee	19	$240
North Carolina	21	264
Texas	24	441
Virginia	25	321
Massachusetts	27	429
Florida	31	389

Compared to the other four states, Texas and Florida costs appear out of line to their productivity level. For Texas this could be due to its higher salaries relative to the other five states. For Florida this could be due to its relatively low salaries. (See salary rates in the chart on p. 38.)

ANALYSIS OF SALARY AND OTHER COST AS RELATED TO TOTAL COSTS

Another important analysis is a comparison of cost per weighted output of state salary costs to the total cost. This comparison shows that high cost states tend to have a higher percentage of nonsalary costs than do the lower cost states. This means that increases in labor productivity will not only reduce direct salary costs but may also reduce nonsalary costs. The first chart (p. 36) shows this analysis. The second chart (p. 37) shows total cost per weighted output for all states. The third chart (p. 38) compares unit costs to other costs, productivity, and salary rates of the states.

Comparison of Direct Worker Salary Cost and Other Cost to Total Cost for Fiscal Year 1982

State	Hours per case	Total unit cost	Salary cost percent of total	Other cost percent of total[a]
Lowest cost:				
Tennessee	19	$ 240	51	49
North Carolina	21	264	57	43
South Carolina	22	275	54	46
Kentucky	21	292	52	48
Indiana	22	294	53	47
Middle cost:				
Wisconsin	26	446	47	53
Delaware	27	482	41	59
Colorado	29	496	53	47
Pennsylvania	28	507	47	53
High cost:				
Wyoming	34	685	46	54
South Dakota	40	715	42	58
Utah	35	769	47	53
North Dakota	35	831	41	59
Alaska	32	1,146	42	58

[a]Other cost includes facilities, supplies, travel, computers, personnel benefits, and indirect personnel costs which are allocated rather than charged directly to the UI program.

Chart Arraying Cost Per Weighted Output by State--Fiscal Year 1982

State	Total cost per weighted output	State	Total cost per weighed output
Tennessee	$240	Colorado	$ 496
North Carolina	264	New Hampshire	496
South Carolina	275	Pennsylvania	501
Kentucky	292	New Jersey	511
Indiana	294	Connecticut	524
Puerto Rico	303	Washington	527
Virginia	321	California	535
Iowa	326	Michigan	536
Louisiana	338	Oregon	537
Alabama	342	Arizona	542
Ohio	358	New Mexico	549
Georgia	364	Oklahoma	560
Mississippi	366	Montana	562
Kansas	373	District of Columbia	584
Arkansas	380	Vermont	590
Florida	389	New York	592
Illinois	398	Nebraska	605
Missouri	407	Rhode Island	606
Maryland	408	Idaho	624
Massachusetts	429	Nevada	636
West Virginia	430	Hawaii	640
Texas	441	Wyoming	685
Minnesota	443	South Dakota	715
Wisconsin	446	Utah	769
Maine	470	North Dakota	831
Delaware	482	Alaska	1,146

Comparison of Unit Costs to Other Costs, Productivity, and State Salary Rates Figures Are for 1982

State	Total unit cost	Percent other cost[a]	Hours per case	Effective salary rate[b]	State	Total unit cost	Percent other cost[a]	Hours per case	Effective salary rate[b]
Tennessee	$240	49%	19	$6.34	Colorado	$ 496	47%	29	$9.09
North Carolina	264	43	21	7.31	New Hampshire	496	54	32	7.36
South Carolina	275	46	22	6.76	Pennsylvania	501	53	28	8.31
Kentucky	292	48	21	7.29	New Jersey	511	49	31	8.61
Indiana	294	47	22	6.96	Connecticut	524	56	25	9.16
Puerto Rico	303	59	29	4.32	Washington	527	50	31	8.49
Virginia	321	48	25	6.78	California	535	51	27	9.58
Iowa	326	49	21	7.75	Michigan	536	53	29	9.23
Louisiana	338	47	21	8.52	Oregon	537	51	31	8.41
Alabama	342	49	26	6.84	Arizona	542	51	31	8.52
Ohio	358	48	26	7.46	New Mexico	549	49	35	8.15
Georgia	364	47	27	7.28	Oklahoma	560	59	24	9.55
Mississippi	366	46	29	6.88	Montana	562	48	37	7.90
Kansas	373	47	25	7.82	District of Columbia	584	59	26	9.08
Arkansas	380	60	20	7.54	Vermont	590	53	40	6.83
Florida	389	49	31	6.50	New York	592	52	33	8.56
Illinois	398	50	24	8.69	Nebraska	605	54	38	7.35
Missouri	407	49	29	7.09	Rhode Island	606	54	32	8.87
Maryland	408	61	24	8.46	Idaho	624	53	32	9.15
Massachusetts	429	52	27	7.63	Nevada	636	53	30	9.94
West Virginia	430	56	28	6.80	Hawaii	640	56	35	8.10
Texas	441	50	24	9.25	Wyoming	685	54	34	9.29
Minnesota	443	45	29	8.48	South Dakota	715	58	40	7.38
Wisconsin	446	53	26	8.13	Utah	769	53	35	10.14
Maine	470	54	31	7.11	North Dakota	831	59	35	9.69
Delaware	482	59	27	7.40	Alaska	1,146	58	32	14.98

[a]Percent of total cost.

[b]Total personnel costs (salaries) divided by total hours from Labor 02B report.

APPENDIX V

OBSERVATIONS ON REASONS FOR COST VARIANCE AMONG STATES

We did not study the reasons for the wide cost variances among the states; however, three contributing factors can be identified from available data. These are (1) productivity, (2) salary rates, and (3) high nonsalary (other) costs. This analysis is shown in the chart on the following page.

Productivity. As shown by a comparison of productivity levels and unit costs, there is a general correlation between them. States having the lowest costs had, with a few exceptions, higher labor productivity. The exceptions fall into two categories: (1) states having low cost but relatively low productivity and (2) states having relatively high cost but high productivity. These states are:

Low cost but low productivity	High cost but high productivity
Puerto Rico	Arkansas
Mississippi	Connecticut
	Oklahoma
	District of Columbia

Salary. Cost is affected by salary rates; some states pay higher salaries than others. Puerto Rico which has relatively low productivity pays relatively low salaries and thus has low unit costs. By contrast, Alaska, which has the highest unit costs, is recognized as a high cost state with relatively high salaries.

Other costs. Cost is also affected by the amount spent for such resources as facilities, supplies, and travel. The four states having disproportionately high unit costs relative to their productivity (see chart above) have higher "other" costs as a percent of total costs than states with comparable productivity. All four are among the top 19 in productivity--this analysis follows.

State (19 most productive)	Productivity (hours per case)	Other costs (percent of total cost)	Total unit cost
Tennessee	19	49	$240
Arkansas	20	**60**	**380**
North Carolina	21	43	264
Kentucky	21	48	292
Iowa	21	49	326
Louisiana	21	47	338
South Carolina	22	46	275
Indiana	22	47	294
Illinois	24	50	398
Maryland	24	61	408
Texas	24	50	441
Oklahoma	24	**59**	**560**
Virginia	25	48	321
Kansas	25	47	373
Connecticut	25	**56**	**524**
Alabama	26	49	342
Ohio	26	48	358
Wisconsin	26	53	446
District of Columbia	26	**59**	**584**

ANALYSIS OF COMPARATIVE EFFICIENCY LEVELS

AMONG OFFICES WITHIN SELECTED STATES

We computed productivity rates for each local office within the six states studied using available data at the state central office. These rates for fiscal year 1982 are shown in the following charts.

Analysis of the office productivity rates for the six states we studied shows that productivity varies more among offices within the studied states than among the states. In one state productivity among offices varied by over 900 percent, while in the other five it ranged from 60 to over 300 percent. Productivity variances of this magnitude create sizable differences in the cost to perform the same tasks. For example, it takes one Texas office about 6 hours to accomplish the same amount of work that another one uses nearly 60 hours to accomplish; this results in costs of $48.17 and $500.24 per weighted case, respectively.

Although the variances were less pronounced within the most efficient state (Tennessee), they were nevertheless indicative of the potential for improvement. Tennessee's most productive office had a rate of 5.5 hours per weighted case compared to 18.1 hours for the one which was least productive. The average high and low rates for the six states reviewed are shown below.

	Unit hours per case			
State	Average	Most productive	Least productive	Percent difference
Tennessee	15	5.5	18.1	229
North Carolina	17	7.0	18.2	160
Texas	22	5.7	59.2	939
Virginia	23	7.1	28.9	307
Massachusetts	24	16.6	26.6	60
Florida	27	16.7	31.9	91

Note: Interstate comparison should not be made of local office productivity. Because of differences between states in the work done by local offices and the work done centrally, comparison is only valid within states.

Chart of Local Office Productivity Rates for Selected States--Fiscal Year 1982

Tennessee

Local office	Output weighted[a]	Hours per output	Local office	Output weighted[a]	Hours per output
Sparta	499	5.50	Johnson City	1,265	12.65
Cokeville	1,465	6.85	Columbia	1,190	13.04
Mountain City	447	8.40	Lebanon	1,220	13.19
Union City	1,024	10.07	Dayton	636	13.24
McMinnville	1,035	10.65	Rockwood	575	13.26
Savannah	843	10.81	Oneida	290	13.61
LaFollette	839	10.93	Lexington	763	13.78
Cleveland	1,101	11.08	Bristol	450	13.81
Clarksville	1,001	11.41	Humbolt	1,259	14.09
Gallatin	1,843	11.43	Knoxville	3,118	14.29
Lawrenceburg	1,139	11.51	Dyersburg	633	14.50
Tullahoma	825	11.75	Morristown	1,072	14.72
Huntington	1,165	11.84	Elizabethtown	479	15.01
Athens	1,656	11.88	Oakridge	545	15.28
Murfreesboro	988	12.04	Kingsport	1,104	15.61
Dickson	921	12.33	Jackson	1,064	15.71
Shelbyville	1,053	12.35	Newport	558	15.88
Crossville	647	12.44	Nashville	3,169	16.79
Greenville	700	12.52	Chattanooga	2,815	17.94
Alcoa	761	12.54	Memphis	5,460	18.09

[a]Number of equivalent units processed during fiscal year 1982.

Chart of Local Office Productivity Rates for Selected States--Fiscal Year 1982

North Carolina

Local office	Output weighted	Hours per output	Local office	Output weighted	Hours per output
Morganton	1,201	7.02	Rockingham	1,403	14.29
Lexington	1,991	8.47	Kinston	1,037	14.47
Concord	2,210	8.76	Murphy	667	14.48
Mount Airy	1,739	9.06	Winston Salem	2,535	14.51
Lenoir	1,991	9.16	Bryson City	706	14.59
Asheboro	1,803	9.16	Clinton	879	14.84
Reidsville	2,110	9.59	Goldsboro	1,096	14.86
Albemarle	1,319	10.06	Washington	648	14.99
Statesville	1,625	10.47	Greenville	725	15.46
Burlington	2,122	10.57	Morehead City	352	15.56
Salisbury	909	10.82	Greensboro	2,155	15.60
Laurinburg	991	11.24	Edenton	249	15.64
Forest City	1,277	11.71	Elizabeth City	412	15.80
Newton	1,319	11.90	Wilmington	1,693	15.90
Boone	875	11.99	Rocky Mount	1,612	15.90
Marion	745	12.13	Asheville	1,552	15.94
Monroe	824	12.13	Hendersonville	574	15.97
Gastonia	2,535	12.30	Roanoke Rapids	634	15.99
New Bern	716	12.45	Sanford	1,126	16.09
Spruce Pine	514	12.54	Williamston	530	16.11
Hickory	1,971	12.59	Durham	1,465	16.57
Lincolnton	1,048	12.66	Lumberton	2,054	17.06
High Point	1,845	13.29	Raleigh	2,322	17.29
Jacksonville	412	13.31	Ahoskie	339	17.51
North Wilkesboro	792	13.64	Charlotte	2,279	17.55
Shelby	1,648	14.14	Henderson	1,254	17.82
Waynesville	515	14.24	Wilson	876	18.02

Chart of Local Office Productivity Rates for Selected States—Fiscal Year 1982

Texas

Local office	Output weighted	Hours per output	Local office	Output weighted	Hours per output
Borger	112	5.65	McKinney	162	21.29
Houston - N. Shore	1,925	9.14	Odessa	350	21.74
Hereford	91	9.73	Denton	449	21.90
El Paso East	1,953	9.82	Pleasant Grove	556	21.97
Arlington	1,354	11.78	Sherman	563	21.97
Houston - S.W.	2,236	13.98	Austin Central	869	22.13
Mid Cities	823	14.03	Texarkana - Local	687	22.14
York Plaza	1,459	14.08	Austin North	360	22.24
Lufkin	534	15.01	Big Spring	115	22.34
Pecos	127	15.10	Marshall	307	22.47
Pasadena	2,045	15.52	Austin South	463	22.80
Victoria	642	15.80	Brownsville	1,016	23.42
Texas City	1,107	15.99	Edgewood Square	134	23.56
Bonham	113	16.19	Tyler	1,243	23.67
Fort Worth DT	2,409	16.47	Terrell Plaza	643	23.77
Richardson - Plano	1,226	16.50	Lone Oak Mall	114	25.03
South Park	1,394	16.83	Garland	704	25.13
Mineral Wells	342	17.35	Galveston	418	25.70
Beaumont - Local	1,230	17.42	McAllen	1,689	25.99
Nacogdoches	375	17.63	Lubbock	774	26.12
Corsicana	222	17.65	Sweetwater	103	26.33
Conroe	648	17.75	Amarillo - Local	555	26.41
San Antonio - Downtown	956	18.10	Brownwood	388	26.51
			Laredo	883	27.16
Corpus Christi - Central	1,849	18.67	Plainview	108	27.19
Mount Pleasant	502	18.70	Lamesa	49	27.46
Grand Prairie	638	18.75	El Paso DT	882	27.48
Bay City	391	18.75	San Angelo - Local	201	27.52
San Antonio - Bandera Road	681	18.78	Temple	334	27.82
			Weslaco	523	28.86
San Antonio - Castle Hill	280	18.79	Paris	275	28.89
			Farmer's Branch	198	29.88
Houston - N.W.	571	18.84	Crystal City	174	30.07
South Park Mall	901	19.26	El Paso N.E.	348	30.27
Westmoreland HT	557	19.48	Edinburg	379	30.41
Spring Branch	905	19.61	Harlingen	537	30.67
Homestead - Tidwell	559	19.79	Waco - Local	722	30.78
Port Artur Cen	1,004	19.92	Killeen	431	31.95
Greenville	292	20.04	Abilene	359	34.09
Wichita Falls	582	20.11	Eagle Pass	562	35.12
Lancaster - Keist	1,329	20.36	Midland	131	37.15
Orange	909	20.42	Childress	42	39.81
Longview - Local	1,004	20.49	Irving	122	40.92
Palestine	204	20.68	King Com Ctr	68	49.56
Bryan	420	20.95	Del Rio	218	50.31
Waxahachie	280	21.08	Vernon	59	59.22

Chart of Local Office Productivity Rates for Selected States--Fiscal Year 1982

Virginia

Local office	Output weighted	Hours per output	Local office	Output weighted	Hours per output
Rocky Mount	400	7.13	Portsmouth	970	17.63
Martinsville	1,916	10.31	Buena Vista	339	17.63
Wytheville	222	10.63	Winchester	980	18.40
Danville	1,572	12.37	Charlottesville	648	18.47
Galax	917	12.67	Williamsburg	43	18.49
Culpepper	544	13.07	Suffolk	330	18.85
South Boston	467	13.65	Virginia Beach	206	19.33
Stuart	49	13.87	Bristol	521	19.35
South Hill	567	14.38	Exmore	348	19.52
Radford	953	14.81	Harrisonburg	787	20.42
Farmville	613	15.52	Front Royal	219	20.58
Fredericksburg	664	15.75	Staunton	641	21.19
Pulaski	343	15.75	Richmond	2,052	21.22
Richlands	644	15.91	Chesapeake	193	21.38
Waynesboro	185	15.95	Emporia	299	21.50
Warsaw	523	16.11	Norfolk	1,636	24.04
Petersburg	929	16.43	Covington	235	24.24
Marion	662	16.79	Alexandria	797	24.47
Roanoke	1,800	17.02	Hampton	231	25.32
Norton	620	17.53	Newport News	1,041	25.37
Lynchburg	1,711	17.59	Seven Corners	1,064	28.89

Chart of Local Office Productivity Rates for Selected States--Fiscal Year 1982

Massachusetts

Local office	Output weighted	Hours per output	Local office	Output weighted	Hours per output
Webster	1,006	16.61	Milford	1,090	21.85
Fall River	2,525	17.28	North Adams	524	22.09
Plymouth	858	17.48	Marlborough	695	22.26
Providence	671	17.59	Quincy	2,061	22.30
Attleboro	1,042	17.84	Pittsfield	798	22.50
Fitchburg	1,089	17.89	Hyannis	1,106	22.57
Taunton	1,006	18.17	Holyoke	731	22.86
Chicopee	1,083	18.25	Springfield	1,865	22.94
Worcester	2,648	18.55	Woburn	971	22.94
Gardner	778	18.63	Malden	1,453	23.11
Chelsea	861	18.80	Greenfield	452	23.52
Clinton	283	18.99	Lawrence	1,866	23.77
Framingham	800	19.55	Newton	1,312	24.10
New Bedford	2,688	19.79	Boston	1,855	24.15
Wareham	620	20.49	Salem	1,221	24.26
Norwood	1,250	20.69	Lynn	1,001	24.62
Newbury Port	866	20.91	Cambridge	1,355	25.16
Northampton	1,081	21.07	Church Park	1,275	25.53
Brockton	1,856	21.37	Gloucester	685	26.57
Lowell	1,752	21.41			

Chart of Local Office Productivity Rates for Selected States--Fiscal Year 1982

Florida

Local office	Output weighted[a]	Hours per output	Local office	Output weighted[a]	Hours per output
Panama City	680	16.66	Saint Augustine	490	22.50
Lakeland	1,271	18.00	Daytona Beach	931	22.93
Plant City	610	18.81	Sebring	327	23.01
Fort Lauderdale	2,976	19.20	Clearwater	1,098	23.15
Winter Haven	1,242	19.41	Jacksonville	2,311	23.27
Altamonte Springs	211	19.43	Saint Petersburg	1,183	23.40
Fort Walton Beach	439	19.66	Melbourne	465	23.58
Sarasota	860	20.21	Brooksville	645	23.63
Sanford	448	20.57	Gainesville	753	23.69
Tampa South	1,632	20.75	Ocala	639	23.85
New Port Richie	711	20.77	Pensacola	954	23.92
Hollywood	1,964	20.99	Delray Beach	714	23.98
West Palm Beach	2,237	21.06	Fort Myers	1,193	24.17
Fort Pierce	1,584	21.21	Cocoa	630	24.22
Winter Garden	199	21.32	Orlando	1,920	25.93
Bradenton	870	21.45	Tallahassee	664	26.29
Tampa, North	1,231	21.55	Leesburg	704	26.40
Marianna	441	21.97	Perrine	882	26.50
Naples	654	22.13	Pinellas Park	190	27.81
Hialeah	2,319	22.33	Key West	176	31.91
Miami	4,163	22.46			

[a]Number of equivalent units processed during fiscal year 1982.

DATA ON HOW PRODUCTIVITY TRENDS AND LEVELS VARY AMONG STATES

Analysis of productivity trend data gives an idea of how each state has performed compared to itself in a prior period. Comparison of the productivity level data, however, tells us how each state compares to other states at a point in time. Both comparisons are important but must be done together to be complete. A state with a very low level of efficiency in the base year would have the potential for much larger productivity gains than one which had a very high level of productivity in the base year.

In analyzing the trends for the states, it becomes apparent that the average efficiency has improved for the states regardless of their 1978 efficiency level standing. One might expect that the least efficient states in 1978 would have experienced the greatest gains, but such was not the case.

In our opinion a key concern is the relationship between base period levels of productivity and the changes in productivity occurring over the measured period. By analyzing the levels of productivity in fiscal years 1978 and 1982 and the trends for the period in the most productive and least productive states, we show the interrelationship between levels and the extent of change in productivity over time.

The following four charts show that the levels and trends of productivity for the most and least productive states have changed significantly over the measured period. The charts demonstrate the following points.

--Some of the states with the lowest productivity in fiscal year 1978 had significant enough improvements during the measured period to move out of the lowest group.

--Some of the states with the highest productivity in fiscal year 1978 did not have significant enough improvements to stay in the highest group.

--Comparing the two sets (states with highest and states with lowest productivity), the average increase in productivity or decline in unit hours per case for each group was about the same: an average productivity increase of 29 percent for the low productivity states (see next page) and 31 percent for the high productivity states (see p. 51).

Productivity Level Analysis
Comparison of Hours
Per Output--Fiscal Years 1978 to 1982

Lowest Productivity States

1978		1982	
State	Hours	State	Hours
Wyoming	56	South Dakota	40
Idaho	51	Vermont	40
Montana	49	Nebraska	38
South Dakota	48	Montana	37
Vermont	48	North Dakota	35
Utah	46	Utah	35
North Dakota	45	Hawaii	35
New Mexico	44	New Mexico	35
Arizona	43	Wyoming	34
Nebraska	43	New York	33

The average reduction in total hours from fiscal years 1978 to 1982 for the lowest productivity states was 29 percent.

In terms of productivity trends from fiscal years 1978 to 1982 for this group:

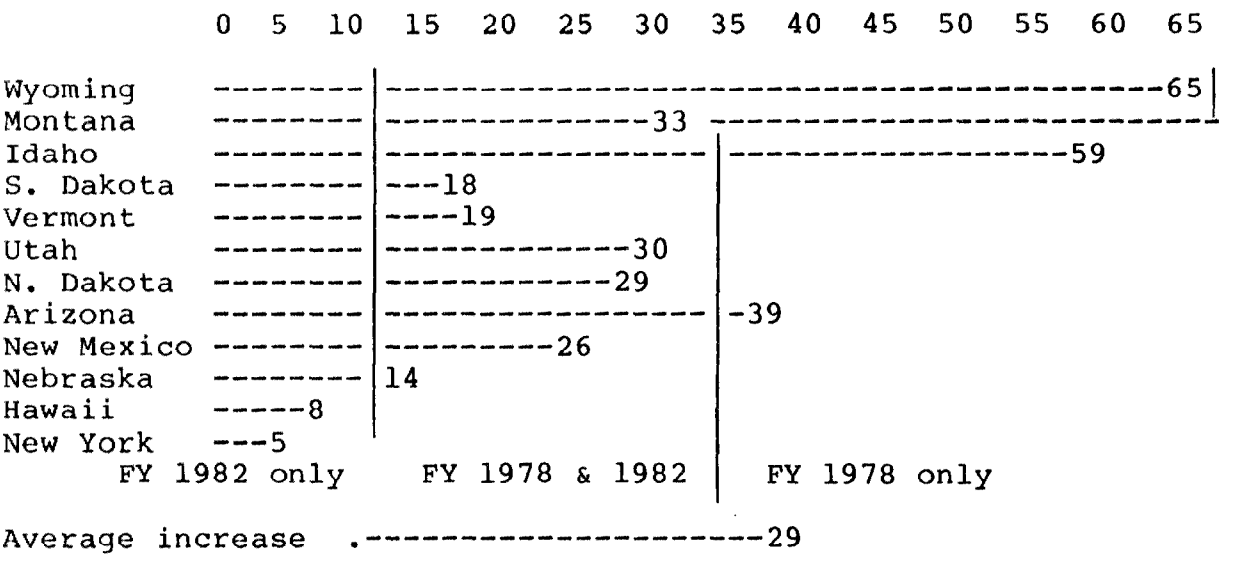
--Wyoming had the highest increase (65 percent).

--New York had the lowest increase (5 percent).

These are shown in the chart on page 50.

Relationship of Productivity Trends to Levels

States With Lowest Levels



Notes:

This chart shows how the trend in productivity interrelates with the level of productivity. The states listed are the 10 with the lowest productivity levels. Twelve states are listed because 2 states which were among the 10 lowest in fiscal year 1978 had sufficient improvements to move out of the group in fiscal year 1982, while 2 other states, which had little productivity improvement during the period, replaced them.

The horizontal dotted lines represent productivity change (trends) for each state during the period. The vertical lines show that Idaho and Arizona had sufficient improvements to move out of the lowest 10 while Hawaii and New York, because of such meager improvement, moved into the lowest 10. Although Wyoming had a very large improvement, its fiscal year 1978 level was so low that it did not leave the low 10.

Productivity Level Analysis
Comparison of Hours
Per Output--Fiscal Years 1978 to 1982

Highest Productivity States

1978		1982	
State	Hours	State	Hours
Delaware	26	Tennessee	19
Illinois	27	Arkansas	20
Kentucky	27	Iowa	21
Tennessee	27	Kentucky	21
Virginia	27	Louisiana	21
Arkansas	28	North Carolina	21
Georgia	28	Indiana	22
South Carolina	29	South Carolina	22

The average reduction in total hours from fiscal years 1978 to 1982 for the highest productivity states was 31 percent.

In terms of productivity trends from fiscal years 1978 to 1982 for this group:

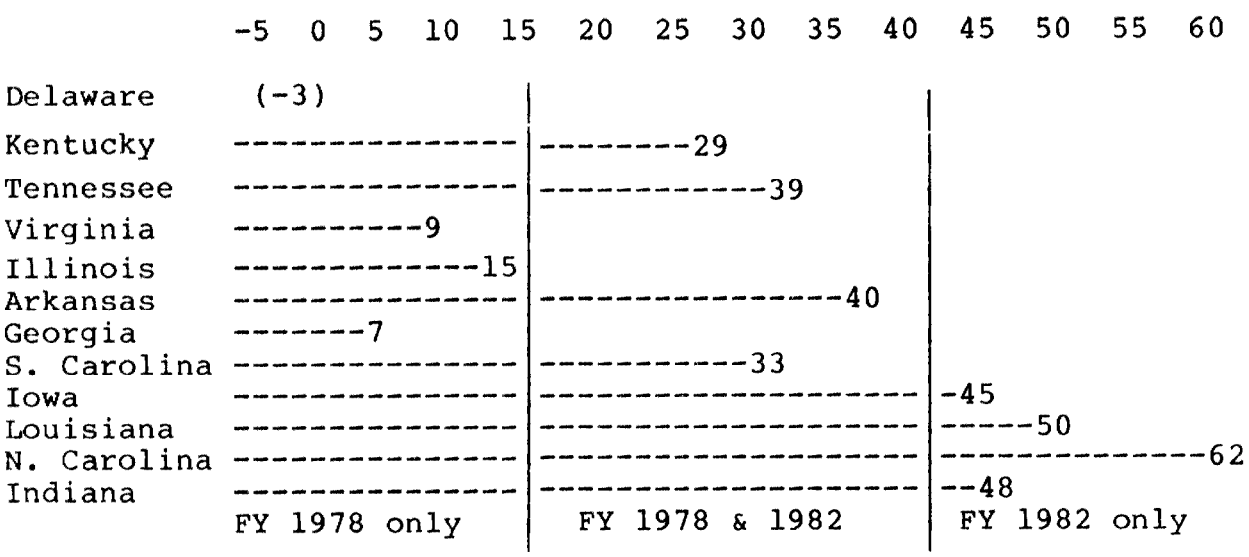
--North Carolina had the highest increase (62 percent).

--Delaware had the lowest increase (a decline of 3 percent).

These are shown in the chart on page 52.

Relationship of Productivity Trends to Levels[a]

States With Highest Levels



Average increase ----------31

[a]See explanation on preceding chart (p. 51).

PRODUCTIVITY VS. QUALITY AND TIMELINESS

Comparison of productivity performance to measures of quality of product delivered are appropriate wherever possible to assure that productivity gains or high productivity levels are not being achieved at the expense of product quality. In the UI program as in most other claims processing activities two primary quality measures are used. These are error rates and timeliness of performance.

There are no consistent measures of error rates which can be compared between states for performance of the UI program. Labor has, however, established a number of on time performance measures and standards of expected performance. A key timeliness measure is the percentage of initial claims processed within a 14- to 21-day period. The following table shows no significant difference between the most and least productive states in terms of this timeliness measure. On average, the five most productive states are 1.8 percent more timely than the five least productive states.

Comparison of Productivity and Timeliness Performance--Fiscal Year 1982

	Local office unit hours[a]	Timeliness[b] (Percent of claims processed within 14 to 21 days)
Labor timeliness goal		87.0
National average		89.5
High productivity states:		
Arkansas	13	89.6
Tennessee	15	98.4
Iowa	15	92.7
Kentucky	16	94.9
North Carolina	17	91.3
Average		93.4
Low productivity states:		
Washington	27	90.5
Vermont	28	87.9
Hawaii	29	90.4
South Dakota	29	95.3
Nebraska	30	94.4
Average		91.7

[a]Local office productivity rate for all offices in the state (does not include time and work done at the state level). Initial claims processing is predominantly done at local office.

[b]Percent of first payments made: (1) within 14 days after becoming eligible for states with a 1-week waiting period and (2) within 21 days for states without a waiting period.

APPENDIX IX

POTENTIAL FINANCIAL BENEFITS

Productivity improvement in the processing of unemployment insurance transactions could produce significant financial benefits. These benefits would be achieved by reducing the time per unit to produce the various outputs (transactions) in the UI program.

We have computed potential benefits using different efficiency levels presently being achieved by some states. These benefits are based on 1982 salary costs reported by the states to the Department of Labor. The potential benefits do not include other (nonsalary) costs which are about one-half of the total administrative costs. We believe, however, that reductions in other costs could be as great as the direct personnel salary cost reductions shown because the states with the highest productivity have a smaller percentage of their total costs in the non-personnel category as shown in appendix V.

In calculating the potential financial benefits we multiplied the level of productivity achievable in terms of cost per weighted output (staff hours x average cost per hour) by the total weighted output quantity produced. We compared this total cost to the cost being expended to show potential benefits. Our calculations are shown on the following page.

Potential Benefits Under Four Productivity Levels

	Level			
	Most productive state	85 percent of most productive state	Midrange of high productivity states	Average productivity level of states
1. Achievable productivity level (hours per weighted output)	19.0	22.0[a]	24.0[b]	27.0[c]
2. Cost per hour[d]	$8.25	$8.25	$8.25	$8.25
3. Achievable cost per weighted output unit (row 1 x row 2)	$156.75	$181.50	$198.00	$222.75
4. Total output (weighted) of all states[e]	3,049	3,049	3,049	3,049
5. Weighted output for states with productivity equal to or greater than the achievable levels shown in line 1.[f]	0	512	837	1,764
6. Cost for states with productivity equal to or greater than the achievable level in line 1.		$ 78	$147	$354
7. Weighted output for states with lower productivity than the achievable level in line 1.		2,538	2,212	1,285
8. Achievable cost for states with lower productivity than the achievable level (row 7 x row 3)		$461	$438	$286
9. Achievable cost[g]	$478[h]	$539[j]	$585[j]	$640[j]
10. Present cost	$679	$679	$679	$679
11. Difference (row 1 - row 9)	$201	$140	$ 94	$ 39

Notes:

1. Weighted output figures are in thousands for rows 4, 5, and 7.

2. Cost figures are in millions for rows 6, 8, 9, 10, and 11.

[a]19 hours per weighted output - most productive state ÷ (.85) = 22 hours per weighted output if lower performing states became 85 percent as efficient as most productive state. This also assumes that states with presently less than 22 hours would remain at their present level.

[b]This level is the midpoint between the median of all states (29) and the lowest (19) hours. Also, implicit in this assumption is that states with presently less than 24 hours would remain at their present level.

[c]This level is the average presently achieved by all states (27). Implicit in this computation is the assumption that states with presently less than 27 hours would remain at their present level.

[d]$678,971,784 ÷ 82,260,245 = $8.25
(Total UI personnel cost) ÷ (Total UI staff hours) = (Per hour cost)

[e]See appendix II for an explanation of how the different UI program outputs are weighted to arrive at a composition output for each office and each state. This number is the sum of the outputs for all the states.

[f]The weighted output for states which were equal in efficiency (same hours per weighted output) or had greater efficiency (less hours per weighted output) than the achievable level shown in line 1.

[g]These potential cost benefits are for personnel only; they do not include reported nonpersonnel costs.

[h]Row 3 x row 4 (e.g., $156.78 x 3,048,857 = $477,908,334.75).

[j]Row 6 + row 8 (e.g., $77,951 + $460,658 = $140,363).

EXPLANATION OF DEPARTMENT OF LABOR'S COST MODEL

State fund requirements are determined through a work measurement based "cost model" system. In the cost model, work is divided into quantifiable units (output) and states measure the number or minutes (input) they use to perform each work unit. ETA monitors the measurement and approves the number of MPUs each state is allowed. States then earn reimbursement based on the volume of work produced. Thus, additional costs can be covered when the volume of work increases and resources can be reduced when the volume decreases.

ETA has been trying to contain administrative costs by (1) narrowing MPU differences between the states and (2) restricting the number of base level positions it will authorize for the state. Because UI must serve all claimants, and since claims workload varies from one time to another, ETA allocates base funds for states to maintain a cadre of permanent personnel to accomplish what it considers to be a minimum workload and approves a contingency funding rate for any excess. For the contingency ("above base") workload, ETA allocates the same MPUs as for "base," but the approved salary level is lower.

According to ETA officials responsible for approving state MPUs, ETA's state-by-state adjustments to state submitted MPUs was not available for fiscal year 1982, but was for 1984, and the methodology was the same in 1984 as in 1982. The following chart shows the effect of Labor's adjustments to one output MPU for processing regular initial claims. The chart shows (1) the state submitted MPU, (2) Labor's adjusted MPU, (3) the amount of Labor's adjustment, and (4) the percentage of adjustment. The procedure followed by Labor in adjusting the regular initial claims MPU is done for each of the measured cost model output products.

Following this adjustment, the MPU for the specific outputs are rolled into the broadband MPUs using the workload and individual output MPU relationships to each other. For example, the broadband initial claims MPU is the weighted summation of the MPUs for the six initial claim types, regular federal employees, exmilitary personnel, intermittent, interstate agent and interstate liable.

APPENDIX X

Analysis of Labor Adjustments of States' MPUs for Regular Initial Claims

State	MPU		Adjustment	
	State's original (1)	Labor adjusted (2)	Amount (col. 1 - col. 2) (3)	Percent (col. 3 - col. 1) (4)
Hawaii	117.695	68.408	49.287	41.9
Utah	111.040	67.897	43.143	38.9
Rhode Island	104.209	67.313	36.896	35.4
Vermont	84.448	66.833	17.615	20.9
Nebraska	81.295	66.462	14.833	18.2
New York	91.631	65.821	25.810	28.2
Minnesota	83.353	65.821	17.532	21.0
New Jersey	76.840	65.821	11.019	14.3
Ohio	68.631	65.821	2.810	4.1
Michigan	65.956	65.821	.135	.2
Massachusetts	65.820	65.820	0	0
Virgin Islands	122.480	53.080	69.400	56.7
District of Columbia	97.764	51.071	46.693	47.8
Wisconsin	50.905	50.905	0	0
Montana	87.322	50.420	36.902	42.3
Nevada	89.707	50.410	39.297	43.8
Wyoming	82.871	50.145	32.726	39.5
South Dakota	79.805	50.127	29.678	37.2
North Dakota	79.136	49.905	29.231	36.9
New Hampshire	73.050	49.497	23.553	32.2
New Mexico	70.107	49.333	20.774	29.6
Colorado	68.126	48.819	19.307	28.3
Mississippi	64.893	48.632	16.261	25.1
Washington	71.460	48.570	22.890	32.0
Idaho	61.597	48.834	12.673	20.7
Puerto Rico	65.785	48.805	16.978	25.8
Arizona	63.953	48.800	15.153	23.7
West Virginia	60.807	48.675	12.132	20.0
Alaska	57.576	48.633	8.943	15.5
Connecticut	59.171	48.393	10.778	18.2
Arkansas	54.895	48.351	6.554	11.9
Louisiana	66.651	48.269	18.382	27.6
Virginia	53.839	48.268	5.571	10.3
Maine	51.200	48.228	2.972	5.8
Oklahoma	52.092	48.218	3.874	7.4
Oregon	51.504	48.174	3.330	6.5
Maryland	50.471	48.133	2.338	4.6
Alabama	50.228	48.107	2.121	4.2
Kansas	48.69	48.080	.610	1.3
North Carolina	51.200	48.060	3.132	6.1
Pennsylvania	73.296	40.061	25.235	34.4
Texas	71.833	48.061	23.772	33.1
Florida	61.867	48.061	13.086	22.3
California	58.870	48.061	10.809	18.4
Georgia	49.770	48.060	1.710	3.4
Missouri	48.060	48.060	0	0
Tennessee	47.822	47.822	0	0
South Carolina	43.770	43.711	0	0
Iowa	42.174	42.174	0	0
Illinois	41.805	41.805	0	0
Indiana	41.708	41.708	0	0
Kentucky	41.708	41.708	0	0
Delaware	38.886	38.886	0	0